International Commission for the Northwest Atlantic Fisheries

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ANNUAL MEETING - JUNE 1976

Norwegian Research Report, 1975

Section I. Subareas 1, 2, 3 and 4

by

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Nominal catches in 1975 by species and areas are given in Table 1. Total Norwegian catches decreased from 59 270 tons in 1974 to 50 991 tons in 1975 mainly due to a decrease in fishing effort in the capelin and cod fisheries. Total capelin catch decreased from 43 980 tons in 1974 to 35 904 tons in 1975, and the cod catches decreased from 7 958 tons in 1974 to 4 902 tons in 1975.

Subarea 1.

A. Status of the Fisheries.

Cod. Catches of cod decreased from 3 506 tons in 1974 to 3 058 tons in 1975. 2 579 tons were taken by longliners and 479 tons by gillnetters.

Deep Sea Prawn.

The fishery for deep sea prawn in Subarea 1 expanded further in 1975. Total catch increased from 5 917 tons in 1974 to 8 678 tons in 1975. 24 trawlers participated in the fishery, and each trawler made 1-5 trips to the area, giving a total of 67 trips. Catch by division and month, days fished and catch per day fished are shown in Table 2.

Subarea 2.

A. Status of the Fisheries.

Cod. Cod catches decreased from 596 tons in 1974 to 211 tons in 1975. All catches were taken by long-line in Div. 2J.

Subarea 3.

A. Status of the fisheries.

Capelin. The Norwegian fishery for capelin on the Grand Banks, Newfoundland, continued in 1975. 4 trawlers and 3 purse seiners participated in the fishery, and the catches were delivered to the factory ship "Nordglobal". A total catch of 35 903 tons were taken during the spawning period in June and July on Southeast Shoal.

Cod. Cod catches decreased from 2 709 tons in 1974 to 1 069 tons in 1975. All catches were taken by long-line, mainly in April-May in Div. 3KL and in August-September in Div. 3Ps.

B. Special research studies.

R/V "Havdrøn" carried out special investigations on distribution and composition of the capelin during the fishing season. For details, see Res. Doc. 76/VI/23.

Subarea 4.

A. Status of the fisheries.

Cod. A total catch of 564 tons were taken, 178 tons in 4Vn and 386 tons in 4Vs. The catches were taken by longliners in the period August - November.

Table 1. Nominal catch in metric tons, 1975 (provisional figures).

Subarea and Division	Capelin	Deep sea prawn	Cod	Other Groundfish	Total
1 A		81	-	-	81
1 B		6 146	3	5	6 154
1 C		543	771	99	1 413
1 D		791	680	80	1 551
1 E		3	1 185	274	1 462
1 F			419	57	476
SA 1, Total		8 678[1)]	3 058	515	12 251
2 J			211	43	254
SA 2, Total			211	43	254
3 K	1		240	34	275
3 L			247	56	303
3 N	35 903				35 903
3 M			111	599	710
3 Ps			471	103	574
SA 3, Total	35 904		1 069	792	37 765
4 Vn			178	44	222
4 Vs			386	113	499
SA 4, Total			564	157	721
Total	35 904	8 678	4 902	1 507	50 991

1) Includes 1114 tons not specified by Division.

Table 2. Deep sea prawn, Subarea 1 (provisional figures)

Catch (tons)

vision	Jan.	Feb.	Mars	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Tot.	Days fished	Catch pe day fish
1 A								8	73				81	20	4.1
1 B	18	269	271	383	459	1067	1083	679	1445	192	280		6146	1131	5.4
1 C	91	118	22	3	60	193		36	20				543	137	4.0
1 D	132	107	22		63	252	2	100	113				791	193	4.1
1 E			1			2							3	3	1
specified													1114		
tal													8678		

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ADDENDUM

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Norwegian Research Report 1975

Section II. Seals

By

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A. Status of the fisheries

Detailed catch and effort data for Norwegian sealing on the Front off Newfoundland - Labrador (subareas 2 and 3) have been submitted to the ICNAF Secretariat for inclusion in a Summary Document to the 1976 Annual Meeting. (Summ.Doc. 76/VI/24)

Participation remained the same as in 1974 and 8 ships with 149 men caught 60 161 harp seals and 10 226 hooded seals. The allocated quotas of 60 000 and 10 000 thus were exceeded by 0.3 % and 2.3 %.

B. Special research studies

Sampling and charting of seal concentrations in relation to ice edges was continued on a commercial sealer on the "Front" off Newfoundland - Labrador from 14 March to 5 April by a representative of the Sea Mammal Section of the Institute of Marine Research, Bergen.

The processing and analysis of age material was brought up to date, and data from these analyses were utilized in estimates of stock parameters. A great part of the effort in 1975 was used to clarify discrepancies between Norwegian and Canadian estimates for northwest Atlantic harp seals.

Harp seals (Pagophilus groenlandicus)

General biological studies were made on the "Front" at Newfoundland, but no age sample was collected in 1975. Very few subadults and adults were taken because favourable ice-and weatherconditions and an abundancy of seals made it possible for all ships to fill most of their quotas with pre- and postmoulting pups.

However, revised estimates based on catch statistics and age analyses of Norwegian catches of harp seals at Newfoundland up to 1974 indicate that natural mortality in this stock is about 10 % per year, that pup production in 1975 was 328 thousand and that the present sustainable yield is 180 thousand harp seals. These results differ markedly from most of the corresponding estimates made by Canadian workers.

The Norwegian assessments and the detailed basic data are now being prepared for publication.

Taggings in 1975 include 38 harp seal pups at Newfoundland. Two harp seals tagged on the "Front" at Newfoundland in 1970 and 1972 were recaptured in the same area, and two harps tagged at Newfoundland in 1972 were recaptured in West Greenland.

Hooded seals (Cystophora cristata)

Sampling and general biological studies were made on the "Front" at Newfoundland and an age sample was collected from 622 breeding hooded seals. Age samples collected in 1973, 1974 and 1975 were analyzed. The data confirm that females are fully recruited among the breeders at an age of 6 years and males at 9-10 years. Estimates from the 1973 and 1974 samples indicate total mortalities of 21-23 % per year for 6-7 years old and older females and 25-30 % per year for 9 years old and older males. The present sustainable yield of northwest Atlantic hooded seals was estimated at more than 24 thousand with the current age and sex composition of the catches.

The 1975 tagging include 65 young and 8 adult hoods at Newfoundland.

Other seal research

Research on physiological aspects of the biology of seals were continued at the Institute of Medical Biology, University of Tromsø, the Institute of Zoophysiology, University of Oslo, and the Institute of Nutrition Research, University of Oslo.